FEDERAL GRANT OPPORTUNITIES

updated 3/26/10

new opportunities or changes highlighted

Open grants & deadlines:

- **FY 2009 Global Climate Change Mitigation Incentive Fund (GCCMIF)**
- **Federal Loan Guarantees for Projects that Employ Innovative Energy Efficiency, Renewable Energy, & Advanced Transmission & Distribution Technologies** *(September 14, 2009-August 24, 2010; November 13, 2009-December 31, 2010)*
- **Industrial Technologies Program Superior Energy Performance Program Administrator Technical Assistance** (March 19-May 6, 2010)
- **University Turbine Systems Research (UTSR) Program** (March 15-April 28)
- **CO2 Utilization** (March 6, April 20)
- **Nuclear Energy University Programs: Reactor Upgrades** (March 24-May 11)
- **Nuclear Energy University Programs: General Scientific Infrastructure Support** (March 24 – April 27)
- **Subsurface Biogeochemical Research** (March 24- April 29 Pre-application, July 15, 2010 Application)
- **Grid-Scale Rampable Intermittent Dispatchable Storage (GRIDS)** (March 2- Mid May, Concept Paper Due April 2)

FY 2009 Global Climate Change Mitigation Incentive Fund (GCCMIF)

- Applications due: Rolling basis
- Visit http://www.eda.gov/ for additional information and for any programming changes
- GCCMIF established to strengthen the link between economic development and environmental quality
- GCCMIF finances projects that foster economic development by advancing the green economy in distressed communities
- Applications are competitive, based on the Economic Development Association's standard eligibility and distress criteria, investment policy guidelines, and funding priority considerations
- Projects must achieve the same job and capital investment outcomes as traditional EDA investments
- Project must be one of the following:
    - Renewable energy (wind, solar, biomass, and geothermal)
    - Energy efficiency
    - Reuse/Recycling/Restoration (reuse of a given product or production of a new or innovative product for recyclable materials; also includes ecosystem restoration)
    - Green building (new construction or renovation certified by USGBC in LEED or comparable certificate program
- Must result with outputs:
    - Development and/or manufacture of green end-product that furthers or contributes to sustainability and/or environmental quality (activity, item, plan, or program)
    - Greening of an existing function or process (investments that result in green enhancements to the resource, energy, water, and/or waste efficiency of an existing function or process)
    - Creation or renovation of a green building

ARRA - Federal Loan Guarantees for Projects that Employ Innovative Energy Efficiency, Renewable Energy, & Advanced Transmission & Distribution Technologies

Funding Opportunity Announcement (FOA) # DE-FOA-0000140

- Application due dates:
    - Parts I & II submission dates depend on rounds
    - Part I: September 14, 2009 – August 24, 2010
    - Part II: November 13, 2009 – December 31, 2010
- Submission of applications for loan guarantees under Title XVII of the Energy Policy Act of 2005 in support of debt financing for projects in the U.S. that employ energy efficiency, renewable energy, and advanced transmission and distribution technologies that constitute new or significantly improved technologies that are not a commercial technology
- DOE will make up to $8.5 billion in loan guarantee authority available
- Despite the due dates, the solicitation will remain open until the aggregate $8.5 billion in loan guarantee authority is fully obligated
- Visit http://www.fedconnect.net/ to view the full FOA, and consult http://www.energy.gov/, http://www.whitehouse.gov/omb/ or http://www.recovery.gov/ for additional information

- Only 3 categories of projects that begin construction no later than 9/30/11 are eligible under Section 1705 of Title XVII and may have their credit subsidy costs covered by appropriated funds under the Recovery Act
    1. Renewable energy systems, including incremental hydropower, that generate electricity or thermal energy and facilities that manufacture related components
    2. Electric power transmission system projects, including upgrading projects
    3. Leading edge biofuel projects that will use technologies performing at the pilot or demonstration scale that the Secretary determines are likely to become commercial technologies and will produce transportation fuels that substantially reduce life-cycle greenhouse gas emissions compared to other transportation fuels
- Eligible projects in categories listed below and which fall within 1 of the 2 distinct project types described:
    1. Alternative fuel vehicles
    2. Biomass
    3. Efficient electricity transmission, distribution, and storage
    4. Energy efficient building technologies and applications
    5. Geothermal
    6. Hydrogen and fuel cell technologies
    7. Energy efficiency projects
    8. Solar
    9. Wind & hydropower

- Technology categories for 1705 eligible projects are limited to renewable energy systems projects, electric power transmission systems projects, and leading edge biofuels projects
- Per DOE, eligible projects under categories 1, 4, 6, & 7 generally do not constitute 1705 eligible projects for which the credit subsidy costs may be paid for out of funds appropriated under the Recovery Act to pay for the costs of loan guarantee issued under the Section 1705 program
- Project types: manufacturing or stand-alone; see FOA for list of primary goals and objectives for these project types

Industrial Technologies Program Superior Energy Performance Program Administrator Technical Assistance

DE-FOA-0000246

- Closing Date: May 6, 2010
- Visit www.grants.gov for more information
- 1 to be Awarded
- Estimated Funding: $370,000 to $5,000,000 over 5 years; subject to availability of funds
- Ceiling: $5,000,000
- Floor: $370,000
- Eligible Applicants: State Governments, County Governments, City of Township Governments, Special District Governments, Independent School Districts, Public and State controlled institutions of higher education, Native American Tribal Governments (Federally Recognized), Native American Tribal Organizations (other than Federally recognized tribal governments), Nonprofits having 501(c)(3) status with IRS other than institutions of higher education, Private Institutions of Higher Education, Individuals, For Profit Organizations other than small businesses, Small Businesses
- Project Income/Cost Sharing
    - Recipient is required to apply all fees collected from plants applying for certification and any other related fees collected pursuant to the SEP Certification program toward project costs.
    - DOE may continue to provide limited funding after the program achieves sustainability to continue to cover SEP program reporting requirements to members of the U.S. CEEM and DOE during the performance period of the award.
    - The applicant should address projected income and strategy for achieving sustainability in the business model submitted as part of the application.
    - The applicant should include projected income in budget documents.
    - Cost share in addition to certification and related fees is also encouraged. Recipient cost share must come from non-federal sources.
- This Funding Opportunity Announcement is to fund an administrator and technical assistance provider for the new American National Standards Institute- accredited Superior Energy Performance industrial plant/facility certification program.
    - The new American National Standards Institute- accredited Superior Energy Performance (SEP) industrial plant/facility certification program will serve as a roadmap for achieving continual improvement in energy efficiency at an industrial facility.
- The Department of Energy will fund one awarded of this FOA as the Superior Energy Performance Program Administrator (SEP-PA).
- The SEP-PA will develop, launch and operate the SEP Certification Program in cooperation with the U.S. Council for Energy-Efficient Manufacturing.

University Turbine Systems Research (UTSR) Program

DE-FOA-0000248

- Closing Date: April 28, 2010
- Expected Awards: 5 - Science and Technology and other Research and Development
- Estimated Total Program Funding: $2,500,000
- Eligible Applicants: Public and State controlled institutions of higher education, and Private institutions of higher education.
- Cost Sharing: The recipient will be required to cost share a minimum of 20% of the total project costs (i.e. total project costs = DOE Share + FFRDC Costs + Recipient Cost Share).
- Visit http://www.netl.doe.gov/technologies/coalpower/turbines for more information
- Key Issues
    - The Advanced Turbine Program addresses key technologies needed to enable the development of advanced gas turbines and gas turbine-based systems that will operate cleanly and efficiently when fueled with coal-derived synthesis gas and hydrogen fuels.
    - Advanced Turbine Program is to provide high efficiency, near-zero emissions and lower cost turbines for coal-based stationary power systems.
    - All projects selected from this FOA are expected to have no significant environmental impacts due to both the scale and type of research activities requested.
    - Applications which propose activities that would require construction outside of a lab-scale or bench-scale setting or significant field work will be declined.
    - To conduct research in understanding combustion phenomena, innovative cooling techniques to maintain integrity of gas turbine components, and to develop high temperature materials as it applies to gas turbines using coal syngas and high hydrogen content (HHC) fuels.
- Technical Issues (include but not limited to)
    - A Increasing mass flow with low BTU fuels
    - Unique combustion properties of hydrogen
    - Dealing with high moisture contents
    - Reducing cooling losses at elevated firing temperature
    - Improving aerodynamics/heat transfer predictions
    - Developing advanced 3-D CFD modeling
    - High temperature and low thermal conductivity thermal barrier coatings (TBCs)
    - Environmental issues with syngas/HHC fuels
    - Improved capability to resist corrosion and oxidation
- Areas of Interest
    - Combustion
    - Aero/Heat Transfer
    - Turbine Materials

CO2 Utilization

DE-FOA-0000253

- Closing Date: April 20, 2010
- Registration Requirements
  - Applicants must obtain a DUNS number. http://fedgov.dnb.com/webform
  - Applicants must register with the CCR. http://www.ccr.gov/
  - Applicants must register with Grants.gov. http://grants.gov/
  - Applicants must register with FedConnect to submit questions. www.fedconnect.net
- For additional information go to www.grants.gov or call 1-800-518-4726
- Estimated Funding: $5.6 million awarded to 6-8 applicants
- Cost Sharing: The Recipient will be required to cost share a minimum of 20 % of the **total project costs** (**Total Project Costs** = DOE Share + FFRDC Costs + Recipient Cost Share).
- Period of Performance: DOE anticipates making awards with project periods of 24-36 months. Budget periods within each project generally do not exceed 12 months in duration.
- Eligible Applicants: All types of entities are eligible to apply, except other Federal agencies, FFRDC Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.
- Objectives
  - To secure applications that will support the Sequestration Programs efforts to develop technologies that utilize CO_2 as a reactant to produce useful products at a net cost of less than $10 per metric ton.
  - The Carbon Sequestration Program involves three key elements for technology development: Core R&D, Infrastructure and Global Collaborations.
  - More information: http://www.netl.doe.gov/technologies/carbon_seq/index.html
- The selected projects will support three of DOE's Strategic Goals:
  - Energy Security – Technologies and approaches developed for beneficial use of CO_2 will offer opportunities to mitigate Green House Gas emissions while developing an industry that could convert the CO_2 to either a fuel or other useable products, reducing the dependence on foreign sources of oil and prolonging the domestic supplies in the United States.
  - Scientific Discovery and Innovation – These projects will seek to develop technologies that enhance our understanding of the chemical and physical processes of conversion of CO_2 to useable products and absorption of CO_2 through indirect sinks.
  - Environmental Responsibility – The projects will facilitate opportunities to utilize or mitigate CO_2 emissions from the fossil fuel based electricity industry as well as other industrial sources that emit CO_2.
- Special Area of Interest: CO2 Conversion to Commodity
  - Current commercial utilization of CO_2 is small compared to total CO_2 emissions, and is often emitted to the atmosphere after use.
  - Applications which propose activities that would require construction or significant field work will be declined.
  - CO_2 mineralization based on methods to enhance natural weathering processes is not of interest for this FOA and this type of application will be declined unless an economically useful product is the result.

Nuclear Energy University Programs – Reactor Upgrades

DE-FOA-0000322

- Closing Date May 11, 2010
- Estimated Funding: $7,000,000 ($3 million is set aside for major reactor infrastructure upgrades and $4 million is set aside for minor reactor infrastructure upgrades)
- Expected Number of Grants:
    - 2 for major reactor upgrades up to $1,500,000
    - 20 for minor reactor upgrades up to a base amount of $150,000 with an additional $50,000 to be made available if the applying university provides a matching amount, for a maximum total of $200,000 in government funding.
- Eligible Applicants: Eligibility for award is limited to U.S. colleges and universities with research reactors. Minority institutions such as historically black colleges and universities and/or minority serving institutions are encouraged to apply.
- Cost Matching: Cost matching is applicable only to minor reactor upgrades for grants under this FOA. Cost matching is encouraged but not required, with an additional $50,000 available if the applying university provides a matching amount.
- For additional information go to www.grants.gov
- Objectives
    - Seeking proposals from U.S. universities and colleges with operating research reactors.
    - The purpose of the program is to upgrade and improve the U.S. university nuclear research and training reactors and to contribute to strengthening the academic community's nuclear engineering infrastructure.
    - Due to funding availability, responses to this FOA are not to include hiring or other human capital costs, or the operation and maintenance of equipment.
    - Institution-specific costs, not specific to the equipment or instrumentation, are the responsibility of the university.

Nuclear Energy University Programs: General Scientific Infrastructure Support

DE-FOA-0000321

- Closing Date April 27, 2010
- Estimated Funding: $7,500,000
- Expected Number of Grants:
    - Approximately 25 Grants with varying amounts depending on project size and available funds with no minimum.
    - Anticipates the awards will consist of up to a $250,000 base with and addition $50,000 for installation or supportive facility upgrades if University provides matching funds.
- Eligible Applicants: award is limited to U.S. universities, colleges, community colleges, and trade schools. Minority institutions such as historically black colleges and universities and/or minority serving institutions are encouraged to apply.
- Cost Matching: Cost matching is encouraged but not required with an additional $50,000 available if the applying university provides a matching amount. The matching funds are to be used for installation and facility upgrades that are *directly* supportive of the equipment purchased through the award.
- For additional information go to www.grants.gov
- Objectives:
    - Seeking proposals for equipment and instrumentation infrastructure to support nuclear energy-related engineering and science teaching and research laboratories.
    - The infrastructure requested by a university should be individual, discrete, and definable items or capabilities that will support, maintain, or enhance the university's or college's capacity to attract and teach high quality students interested in nuclear energy-related studies; build the university's or college's NS&E basic research or education capabilities; or enhance the university's or college's capability to perform R&D that is relevant to DOE-NE's R&D mission.
    - All equipment and instrumentation and associated facility upgrades requests that support nuclear energy related R&D or education are welcomed.
    - Requests made under this FOA may include the purchase, set-up, and vendor installation costs for equipment and instrumentation, as well as building modifications that immediately support the installation and operation of the equipment given the university matches partial funding.
    - Due to funding availability, responses to this FOA are not to include hiring or other human capital costs, or the operation and maintenance of equipment.
    - Institution-specific costs, not specific to the equipment or instrumentation, are the responsibility of the university.

Subsurface Biogeochemical Research

DE-FOA-0000311

- Pre-application Due Date: April 29, 2010
- Application Due Date: July 15, 2010
- For additional information go to http://www.grants.gov/GetStarted
- Registration Requirements
  - Applicants must obtain a DUNS number. http://fedgov.dnb.com/webform
  - Applicants must register with the CCR. http://www.ccr.gov/
  - Register with the credential provider
  - Applicants must register with Grants.gov. http://www.grants.gov/GetStarted
- Estimated Funding: $5,000,000 for 15-20 Awards
  - Annual budgets for single investigator projects may not exceed $250,000/year total costs.
  - Annual budgets for multi investigator projects may not exceed $450,000/year total costs.
  - For an Exploratory Application (narrative limited to 10 pages), applicants may request project support for up to two years with a total budget of up to $150,000.
- Eligible Applicants: All types of entities are eligible to apply except Federally Funded Research and Development Center (FFRDC) Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.
- Objectives
  - Applications for research grants for Subsurface Biogeochemical Research (SBR), which is within the Climate and Environmental Sciences Division (CESD) in the Office of Biological and Environmental Research (BER).
  - SBR seeks to advance fundamental science towards solutions to key DOE environmental challenges including carbon sequestration, contamination from past nuclear weapons production and a scientific basis for the long term stewardship of nuclear waste disposal.
  - Basic research to investigate the key processes affecting the mobility of subsurface contaminants found at DOE sites.
  - Support innovative, fundamental research investigating the coupled physical, chemical, and biological processes affecting the transport of subsurface contaminants at DOE sites.
  - Applications should identify critical knowledge gaps and address hypothesis-driven research to better understand the significant physical, chemical, and biological processes influencing the form and mobility of DOE contaminants in the subsurface.
  - Research projects should aim to provide the scientific basis for the long term stewardship of contaminated sites across the DOE complex and the development of new remediation concepts and strategies.
  - Applications must address the applicability of the proposed research to understanding DOE relevant, field-scale, contaminant transport processes by including an explanation of how the proposed effort will support the accomplishment of the BER long term performance measure.

Grid-Scale Rampable Intermittent Dispatchable Storage (GRIDS)

DE-FOA-0000290

- Concept Paper submission deadline: April 2, 2010
    - Consisting of an abstract, technical section, and cost summary. The Concept Paper must address the programmatic goals, objectives, and/or performance metrics.
- Full Application submission deadline: mid-May 2010
- Anticipated Individual Awards: $500,000 to $10 million. Multiple awards are anticipated, but not required. The Government reserves the right for one, several, or no awards under this FOA.
- Eligible Applicants: Any type of capable technology research and development entity. This includes, but is not limited to, for-profit entities, academic institutions, research foundations, not-for-profit entities, collaborations, and consortia.
- Cost Sharing Requirements:
    - If an applicant is exclusively a university or other educational institution, a cost share of at least 10% of the total allowable costs will be required.
    - For consortia or teams consisting exclusively of Educational Institutions, cost share of at least 10% is required.
    - If an applicant is not an Educational Institution ("Other Applicant"), a cost share of at least 20% of the total allowable costs will be required. For consortia or teams including one or more Other Applicants, cost share of at least 20% is required.
    - For awards where ARPA-E determines that use of a TIA is appropriate -- when a standard cooperative agreement is not feasible or appropriate -- a cost share of at least 50% of the total allowable costs will be required to the maximum extent practicable.
    - The Government share shall include any costs incurred by Federally Funded Research and Development Centers. Cost sharing beyond the required minimum amount is encouraged and may be considered during the selection process.
    - Monetary cost share is preferred; however, in-kind cost share is permitted and will be considered.
- Goals
    - To develop innovative energy storage technologies which have the cost and reliability of hydroelectric power, yet have the capacity for deployment in any location.
    - The cost effective grid-scale energy storage technologies developed in this program will lower CO2 emissions from U.S. electricity generation, improve security through enhanced power reliability and establish U.S. leadership in advanced energy storage systems.
    - To fund high-risk, high-reward research efforts to address emerging grid-scale energy storage needs.
- Details
    - Seeks to develop a new generation of low-cost energy storage technologies for the electricity grid.
    - Address emerging intermittency and ramping challenges for the transmission of renewable electric energy, through cost-effective storage.
    - A successful project will be such that at the end of the project the transformational technology will be sufficiently advanced and well defined in terms of performance and risk to promote next-stage development or transfer of the project to next-stage developers.